Office of Chief Counsel
Internal Revenue Service

memorandum

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date: FEB 11 2000

to: Chief, Examination Division, Michigan District
Attn: Branch 1, Case Manager Dave Horton

from: District Counsel, Michigan District, Detroit

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subject: [redacted]
§41 Credit: J.I.T. Expenses

This memorandum responds to your request for assistance regarding the above-referenced taxpayer's claim for a Section 41 credit in connection with implementation of "Just in Time" ("J.I.T.") inventory manufacturing practices. This issue is being coordinated with Joni Larson of our National Office. The advice in this memorandum is subject to ten day post-review in the National Office, pursuant to CCDM (34)3(19)4, and should not be relied upon for a period of thirty days.

<u>DISCLOSURE STATEMENT</u>

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This advice is not binding on Examination or Appeals and is not a final case determination. Such advice is advisory and does not resolve Service position on an issue or provide the basis for closing a case. The determination of the Service in the case is to be made through the exercise of the independent judgment of the office with jurisdiction over the case.

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ISSUE

Under the circumstances described below, whether [redacted]'s expenditures related to implementing J.I.T. inventory manufacturing practices qualify as qualified research expenditures, pursuant to I.R.C. §41(1)(d)(A).

CONCLUSION

NO. [redacted]s expenditures to implement J.I.T. inventory practices fall within the terms, "management function or technique," "another's . . . process," or "efficiency survey." Therefore, [redacted]'s expenditures on J.I.T. practices is excluded from the definition of a qualified research expenditure, pursuant to I.R.C. 41(d)(1)(A).

FACTS

In [redacted], [redacted] set out on a mission to improve every aspect of its business. The corporation wished to implement a process that would improve the overall manufacturing, inventories and cost management practices. This project at Plant A evolved into a Just-In-Time (JIT) conversion. JIT practices describe an inventory system that allows for the elimination of inventory stockpiles and inefficiency and waste; raw materials arrive "just in time" for production and finished goods "just in time" for sale. This JIT conversion within [redacted] was also commonly referred to as "the cell manufacturing conversion." This effort began at the Plant A facility in [redacted] and was successfully implemented in [redacted]. Specifically, the fundamental JIT objectives at Plant A were to (1) Reduce Lead Times; (2) Reduce Finished Good Inventory Levels; and (3) Reduce the in-house Inventory of Component Parts.

Various employee teams were formed for the purpose of meeting these JIT objectives. These JIT teams' activities included:

1) Evaluation of the current procedures to identify opportunities for improvements;
2) Evaluation of the current plant layout to identify a more optimal layout for the JIT methodology;
3) Movement and consolidation, in some instances, of current equipment in order to optimize space; and
4) Evaluation of current Material Requirement Process (MRP) system to identify shortfalls and determine methods for mitigating weaknesses in a Just in Time (JIT) environment and development of focus factories, including full implementation of a Kan Ban system. This was an extremely labor-intensive effort.

A partial listing of certain of the improvements made as a result of implementing JIT at the Plant A facility include:

1) Finished goods inventory has been drastically reduced, as has the corresponding carrying costs to the corporation;
2) The corporation made significant improvements in the area of plant layout utilization – specifically, the plant now utilizes [redacted] of the space previously required (pre-JIT) in its warehouse for finished goods inventory;
3) The customer lead times were significantly reduced from [redacted] weeks to [redacted] days.

By [redacted], Plant A was able to successfully meet all of the basic functional requirements and business needs included in their stated objectives for JIT. It was at this time that all of the JIT implementation efforts subsided, and instead, the plant adopted a JIT "maintenance" mode of operations. In [redacted], the taxpayer was able to measure their success in meeting the JIT objectives, as follows:

1) The corporation successfully reduced its finished goods inventory levels, saving the company significant dollars in [redacted] and into the future;
2 The corporation was able to significantly reduce the in-house inventory of component parts, also resulting in significant savings; and
3) By implementing the cell-manufacturing environment, the corporation was able to establish a more flexible workforce. This has resulted in significantly less down time in the plant, resulting in substantial savings in operating expenses.

LAW

Section 41 of the Code provides a research credit "in an amount equal to the sum of – (1) 20 percent of the excess(if any) of --(A) the qualified research expenses for the taxable year, over (B) the base amount, and (C) 20 percent of the basic research payments. The term qualified research expenditures is defined in Section 41(d)(1) as:

> "(A) with respect to which expenditures may be treated as expenses under section **174,**
> (B) which is undertaken for the purpose of discovering information--
> (i) which is **technological in nature**, and
> (ii) the application of which is intended to be useful in the development of a **new or improved business component** of the taxpayer, and
> (C) substantially all of the activities of which

> constitute elements of a **process of experimentation** for a purpose described in paragraph (3). "

I.R.C. §41(d)(1). (Emphasis Added.)

Treas. Reg. 1.174-2(a)(3) excludes expenses from qualifying as "research and experimental expenditures," to the extent they are comprised of: (i) The ordinary testing or inspection of materials or products for quality control (quality control testing); (ii) Efficiency surveys; (iii) Management studies; (iv) Consumer surveys; (v) Advertising or promotions; (vi) The acquisition of another's patent, model, production or process; or(vii) Research in connection with literary, historical, or similar projects. *See,* Rev. Rul. 80-245, pg.*5, 1980-2 C.B. 72. As such, to the extent an expenditure would not be deductible under I.R.C. §174, such expenditure would not be considered a "qualified research expense," for purposes of the I.R.C. §41 credit, pursuant to I.R.C. §41(d)(1)(A).

Similarly, subparagraph I.R.C. §41(d)(4)(D) specifically excludes the following from the term, "qualified research expenditures,": (i) efficiency surveys; (ii) activity relating to management function or technique; (iii) market research, testing, or development (including advertising or promotions); (iv) routine data collection; or (v) routine or ordinary testing or inspection for quality control.

ANALYSIS AND CONCLUSION:

The expenditures at issue consist of the wages of teams formed by the taxpayer for the purposes of implementing JIT practices. The taxpayer's objectives for this conversion to JIT practices were to (1) reduce lead times, (2) reduce finished goods inventory levels, and (3) reduce the in-house inventory of component parts. As such, the taxpayer's JIT related teams were formed to study and implement a pre-existing inventory management technique designed to increase the efficiency of its inventory management.

The cost of acquiring or implementing an existing process is not included within the term, "research and experimental expenditures," as defined within Treas. Reg. 1.174-2(a)(3). *See,* FSA 199930016, pg. *17. Moreover, any study of the effectiveness of the taxpayer's JIT conversion is similarly excluded from Section 174, "research and experimental expenditures." *See,* PLR 7402139350A, pg. *12. Although these cannot be cited as precedent, FSA 199930016 and PLR 7402139350A are consistent with this analysis. In sum, the wage expenditures made to study or implement JIT practices are specifically excluded under Treas. Reg. 1.174-2(a)(3), and as such, do not qualify for the I.R.C. §41 credit, pursuant to I.R.C. §41(d)(1)(A). Similarly, such expenditures are also specifically excluded under I.R.C. §41(d)(4)(D).

Additionally, while not controlling authority with respect to the above-referenced circumstances, the proposed regulations exclude from the I.R.C. §41(d) term, "qualified research expenditures:"

> Management functions (except for the direct supervision of qualified research as defined in section 1.41-2(c)(2)) or techniques, including such items as preparation of financial data and analysis, development of employee training programs and management organization plans, and **management-based changes in production processes (such as rearranging work stations on an assembly line**.

Proposed Treas. Reg. §1.41-4(c)(5)(ii). (Emphasis Added.)

As your aware, I.S.P. Counsel, Michael Goldbas, concurs with our position. Additionally, we have coordinated this issue with Joni Larson in our National Office. If you have any questions regarding this matter, please contact the undersigned attorney at (313) 237-6433.

PHOEBE L. NEARING
District Counsel

By: ______________________
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